Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-5.   (Canceled).

6.   (Previously Presented) A method of controlling a door of a drum type washing machine, the method comprising:

sensing a water level in a washing tub using a sensor coupled to the washing tub;

comparing in a controller of the washing machine the sensed water level to a reference water level previously stored in the controller; and

locking or unlocking the door based on a result of the comparing step.

7.   (Previously Presented) The method as claimed in claim 6, wherein locking or unlocking the door comprises locking the door when the sensed water level is higher than the reference water level, and unlocking the door when the sensed water level is lower than the reference water level.

8.   (Previously Presented) The method as claimed in claim 6, further comprising displaying a lock/unlock status of the door on a display portion of the washing machine.

9.   (Previously Presented) The method as claimed in claim 6, further comprising

determining whether power is applied to the washing machine using the controller and its

operable coupling to a plurality of functional elements of the washing machine prior to sensing

the water level in the tub.

10.   (Currently Amended) The method as claimed in claim 9, further comprising

~~locking~~maintaining a locked state of the door when ~~it is determined~~the controller determines

that power is not applied, and determining whether the washing tub is rotating when ~~it is~~

~~determined~~the controller determines that power is applied.

11.   (Currently Amended) The method as claimed in claim 10, further comprising

~~locking~~maintaining the locked state of the door when it is determined that the washing tub is

rotating, and performing the sensing step when it is determined that the washing tub is not

rotating.

12.   (Currently Amended) The method as claimed in claim 9, further comprising

~~locking~~maintaining a locked state of the door when ~~it is determined~~the controller determines

that power is not applied, and   performing the sensing step when ~~it is determined~~the controller

determines that power is applied.

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13-15. (Canceled).

16.   (Previously Presented) A method of controlling a door of a drum type washing machine, the method comprising:

receiving, in a controller which is operably coupled to a plurality of functional elements of the washing machine, a command to open the door;

determining whether power is applied to the washing machine using the controller and its operable coupling to the plurality of functional elements;

unlocking the door when the controller determines that power is not applied, and determining whether water is present in a washing tub of the washing machine when the controller determines that power is applied using a water level sensor coupled to the controller;

unlocking the door when the controller determines that water is not present in the washing tub, and sensing a water level in the washing tub using the water level sensor operably coupled to the controller when the controller determines that water is present in the washing tub; and

locking or unlocking the door based on the sensed water level.

17.   (Previously Presented) The method as claimed in claim 16, wherein locking or unlocking the door comprises comparing, in the controller, the sensed water level to a reference water level previously stored in the controller to determine whether to lock or unlock the door.

18.   (Previously Presented) The method as claimed in claim 17, further comprising locking the door when the controller determines that the sensed water level is higher than the reference water level, and unlocking the door when the controller determines that the sensed water level is lower than the reference water level.

19.   (Previously Presented) The method as claimed in claim 16, further comprising displaying a lock/unlock status of the door on a display portion of the washing machine.

20.   (Previously Presented) The method as claimed in claim 16, further comprising determining whether the washing tub is rotating using a motor sensor operably coupled to the controller when the controller determines that power is applied.

21.   (Previously Presented) The method as claimed in claim 19, further comprising locking the door when the controller determines that the washing tub is rotating, and sensing the water level in the washing tub using the water level sensor when the controller determines that the washing tub is not rotating.

22. (Previously Presented) The method as claimed in claim 6, wherein the reference water level is a level which is above a bottom of the washing tub and less than or equal to a bottom of the door.

23. (Previously Presented) The method as claimed in claim 17, further comprising draining water in the washing tub to less than the reference water level and thereafter unlocking the door when the controller determines that the sensed water level is higher than the reference water level.

24. (Previously Presented) The method as claimed in claim 17, wherein the reference water level is a level which is above a bottom of the washing tub and less than or equal to a bottom of the door.